

Figure 1

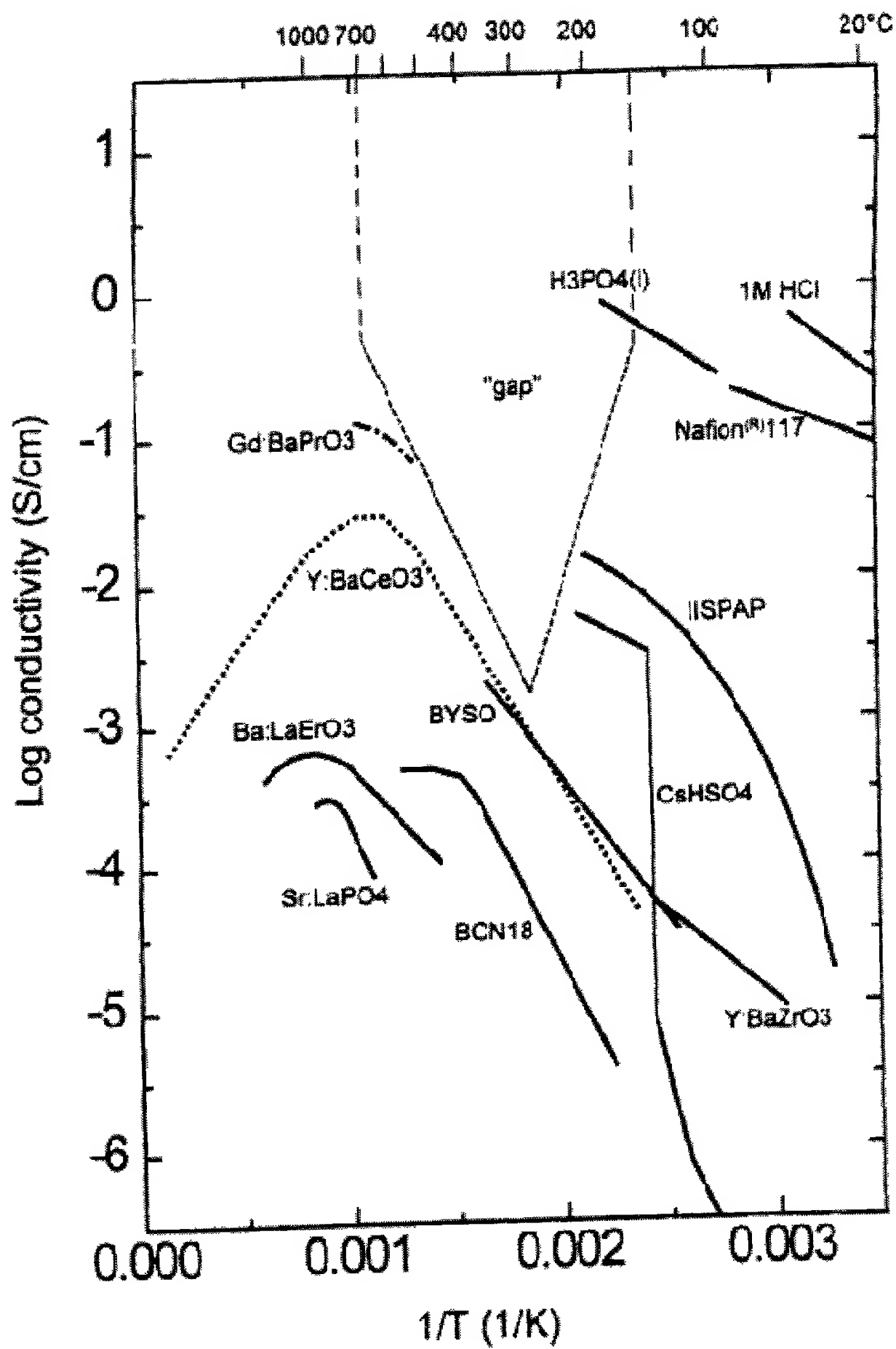
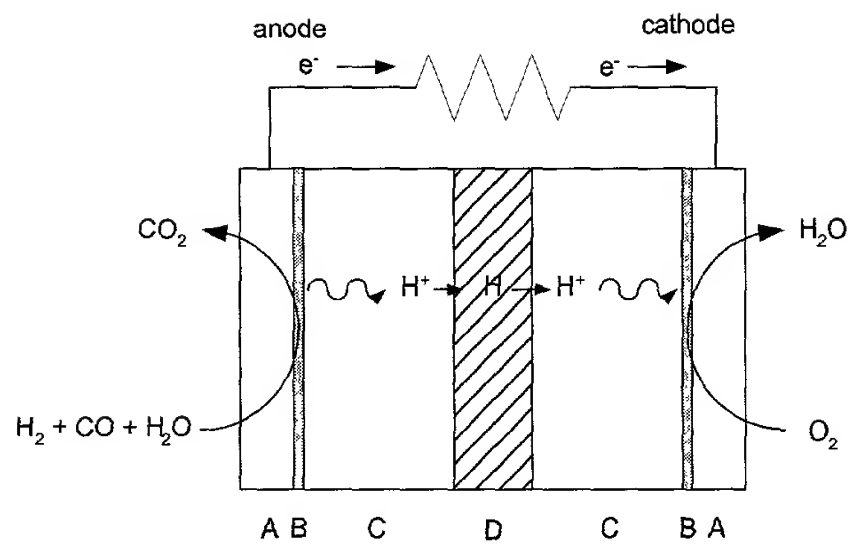


Figure 2



- A: Porous Gas Diffusion Electrode
- B: Electrocatalyst Layer
- C: Proton Permeable Electronic Insulator Layer
- D: Palladium Membrane

**Figure 3**

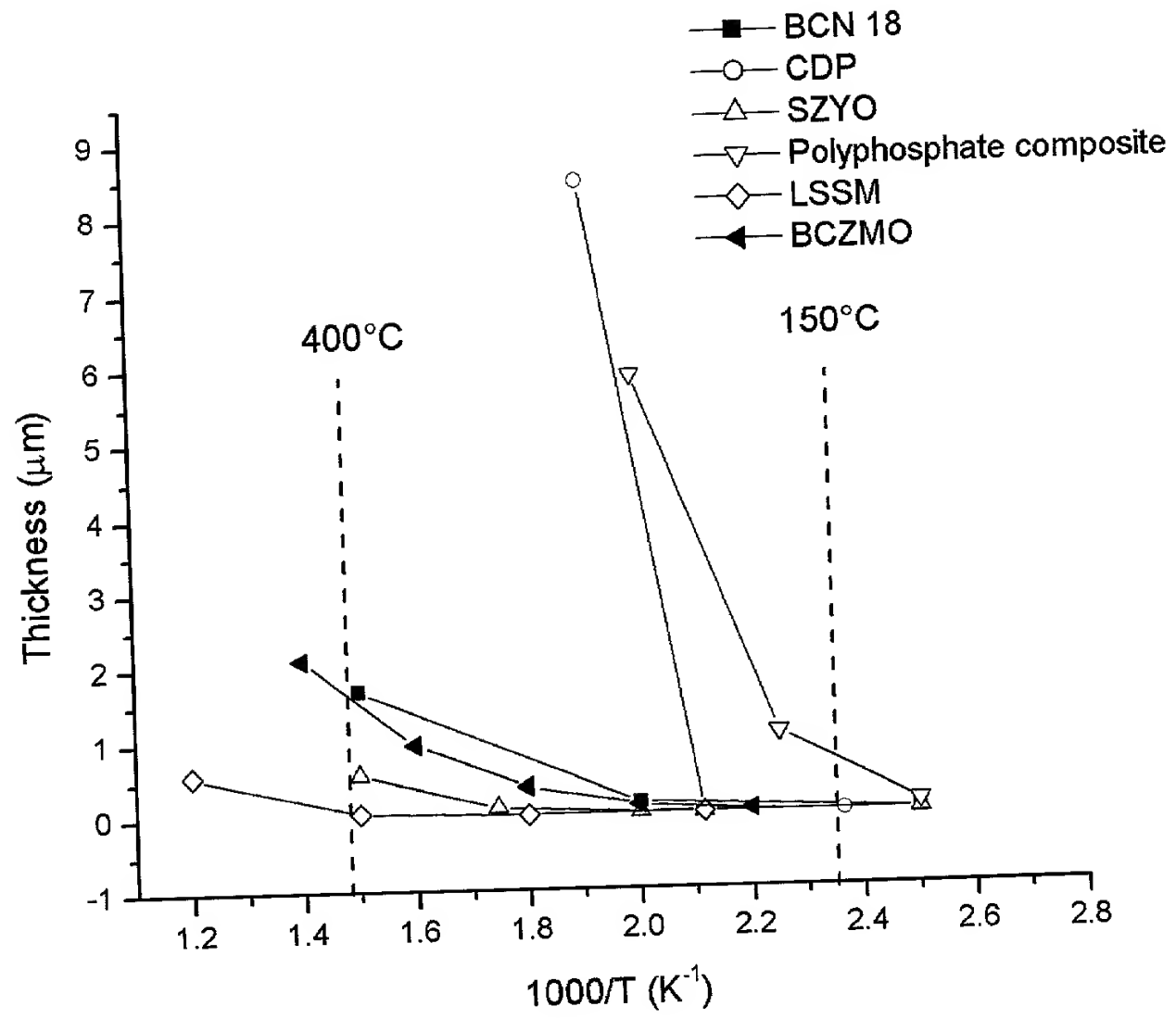


Figure 4

# Membrane Electrolyte Assembly

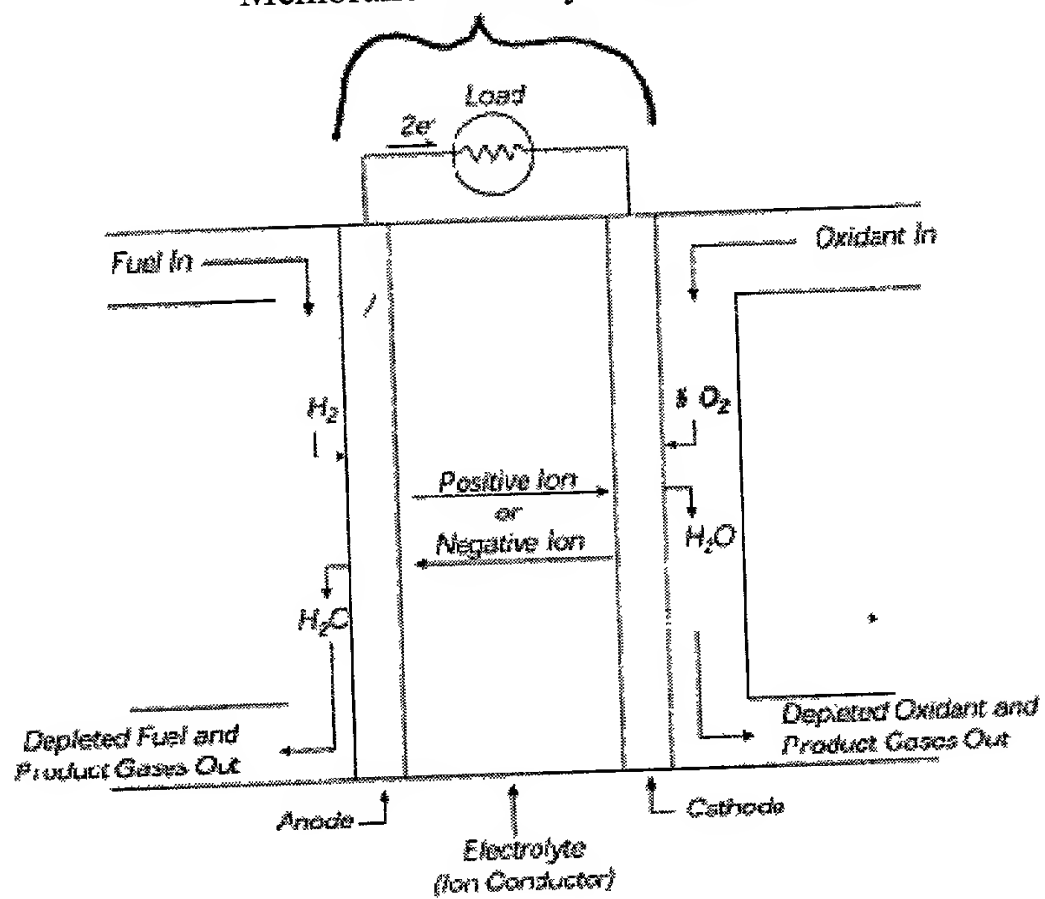
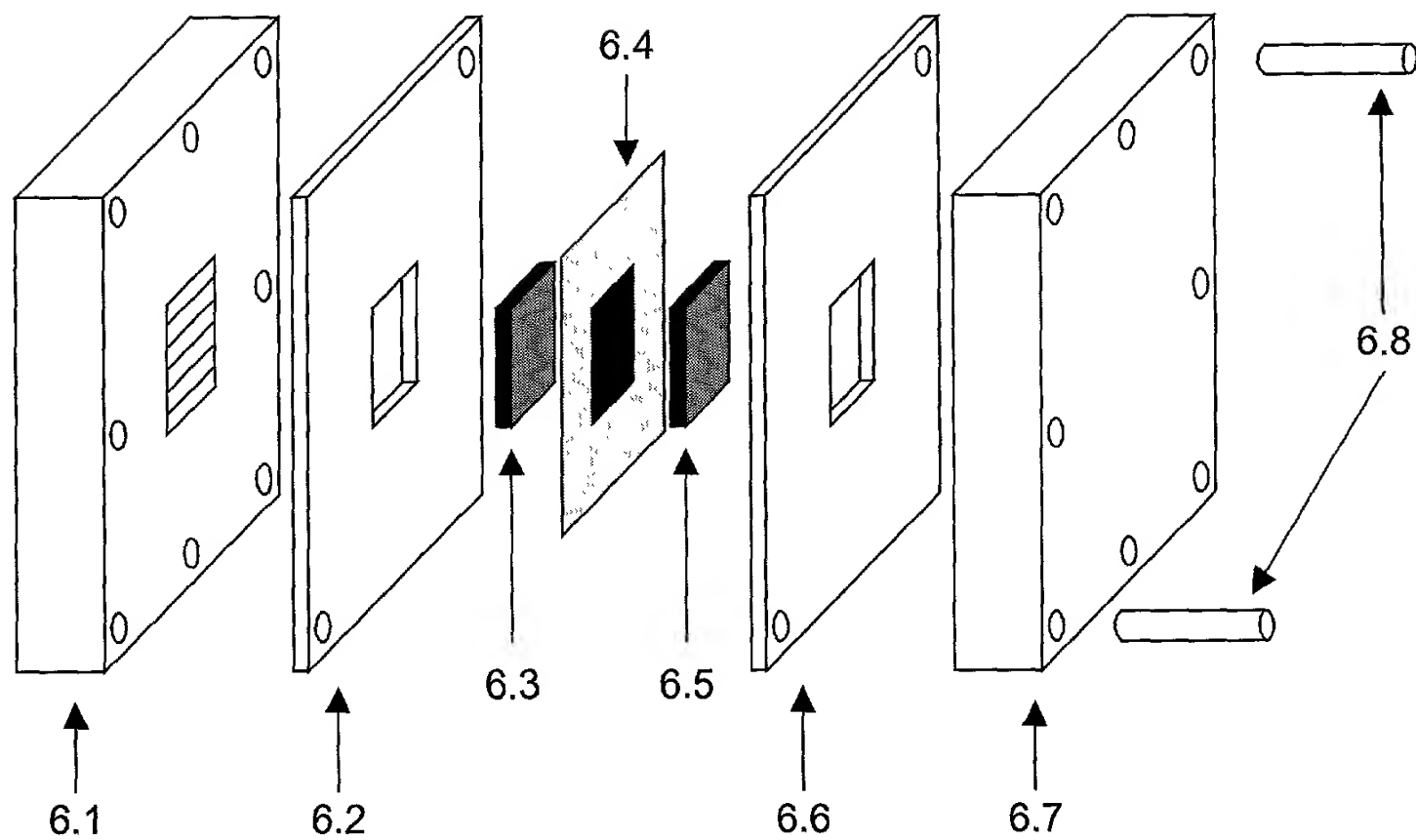


Figure 5



- 6.1 Graphite block with anode flow field  
 6.2 PTFE gasket  
 6.3 Anode: catalyzed gas diffusion layer (carbon cloth)  
 6.4 Proton Conducting Composite Membrane comprising an electronically insulating proton conductor (hatched section) supported on a metal hydride, i.e., Pd foil (dotted section)  
 6.5 Cathode: catalyzed gas diffusion layer (carbon cloth)  
 6.6 PTFE gasket  
 6.7 Graphite block with cathode flow field  
 6.8 Alignment pins

**Figure 6**

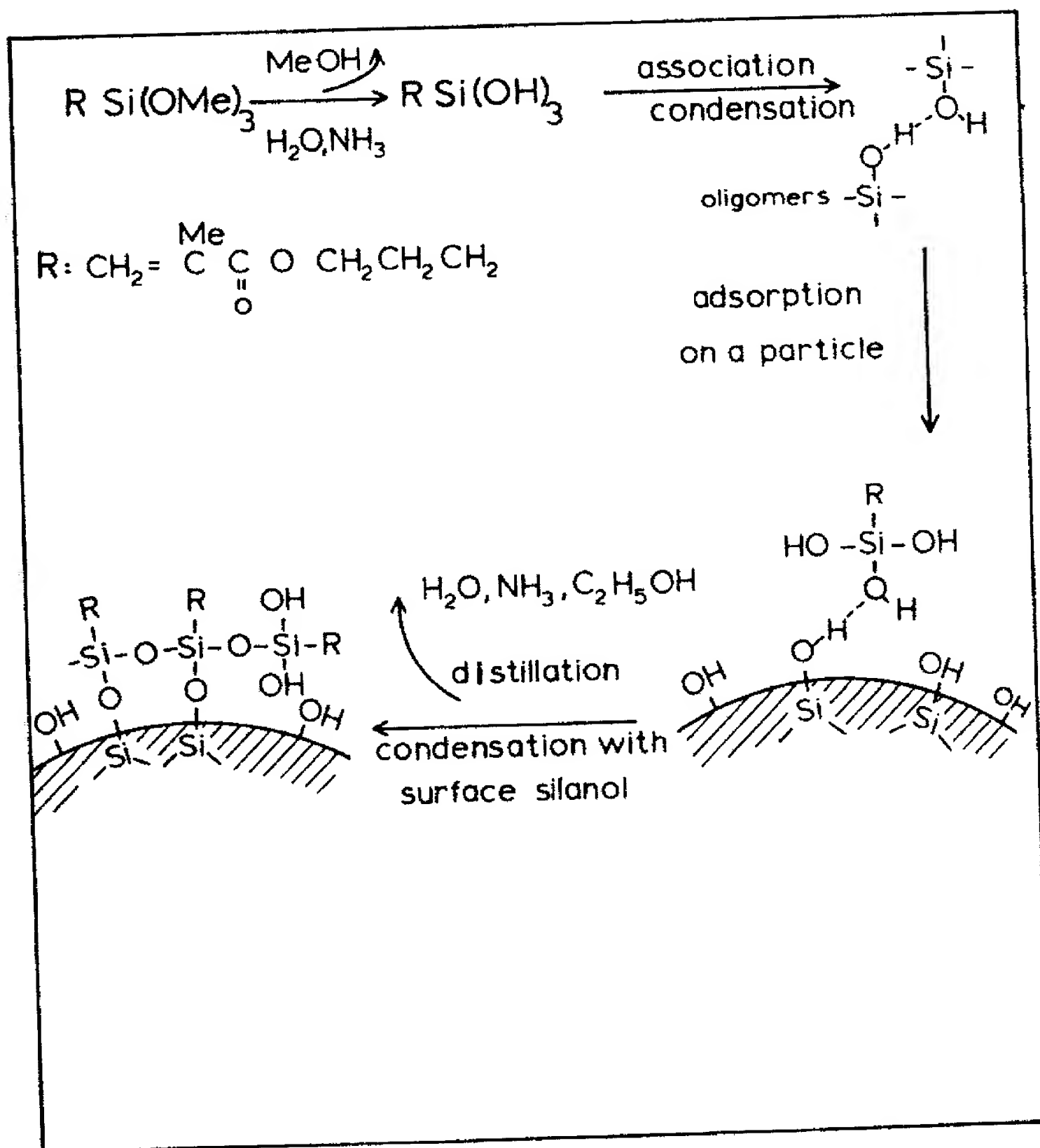
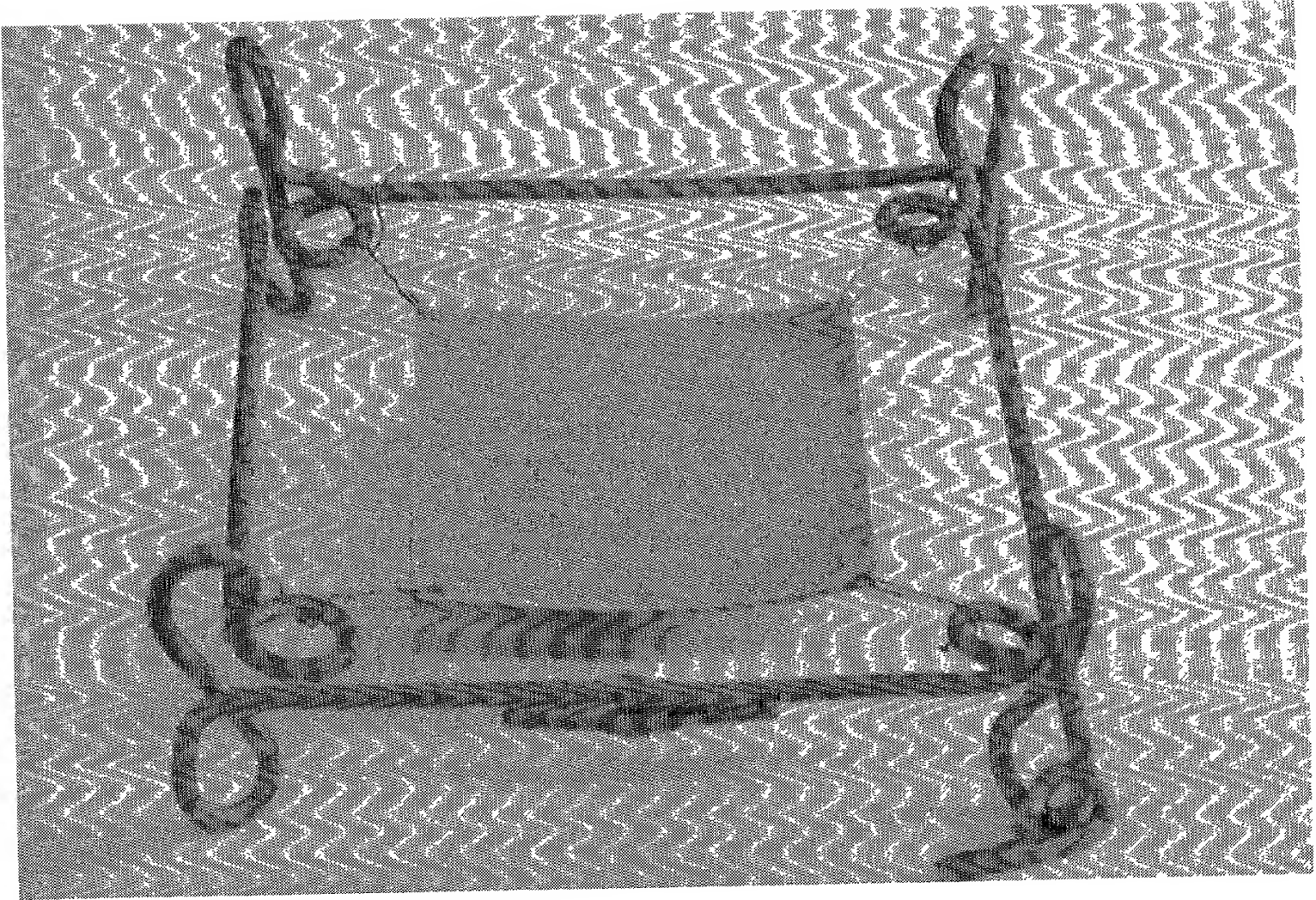


Figure 7



**Figure 8**



Intermediate temp fuel cell, H<sub>2</sub>/O<sub>2</sub>

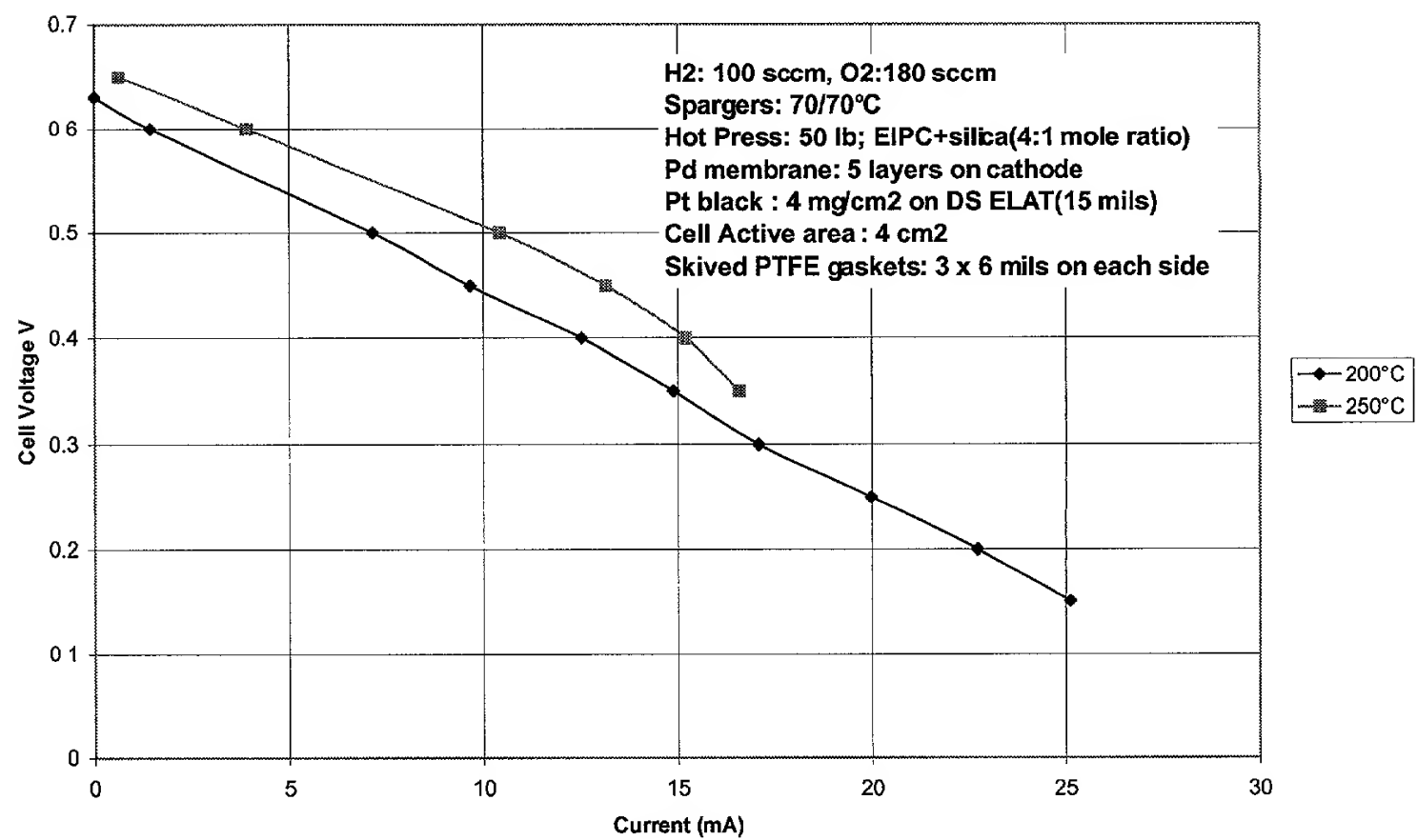


Figure 9

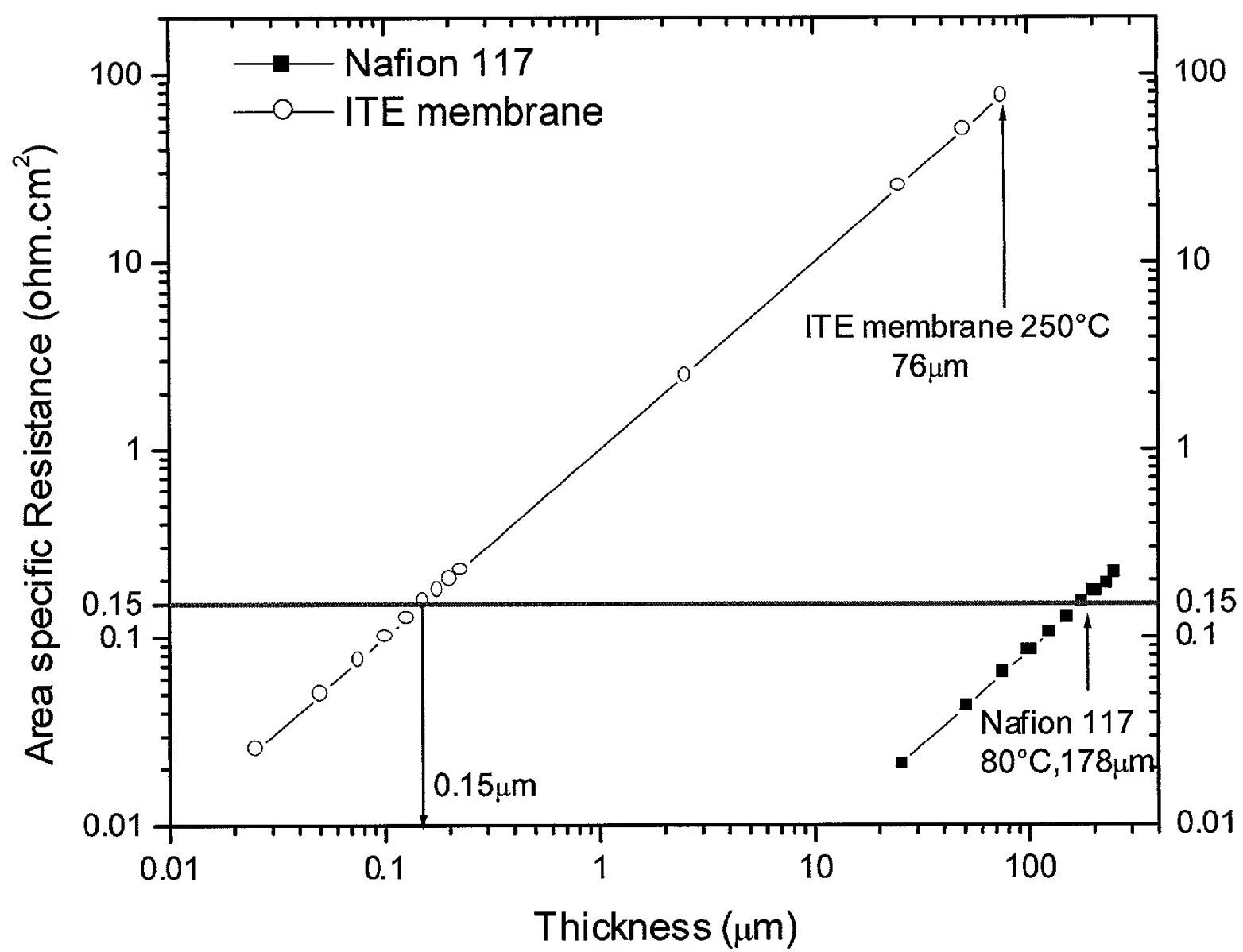
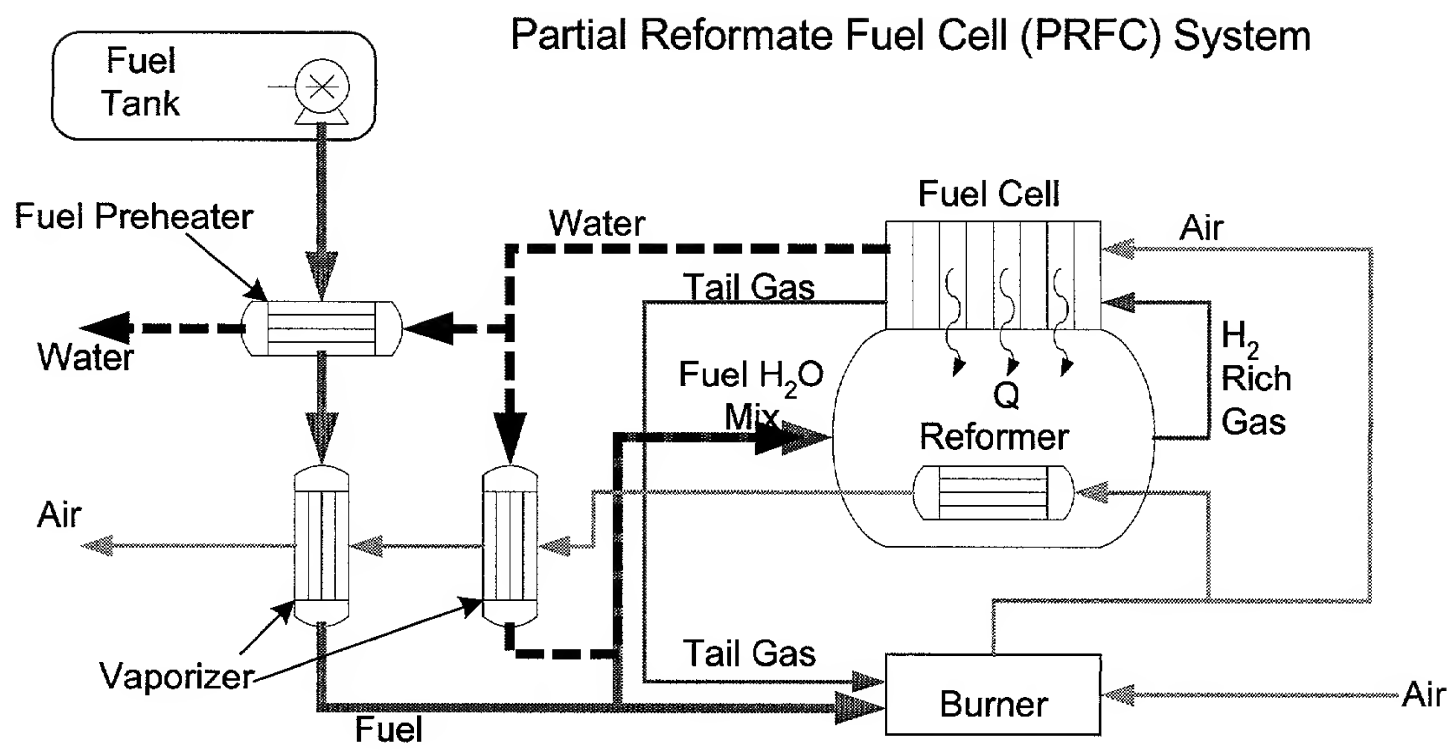


Figure 10



**Figure 11**

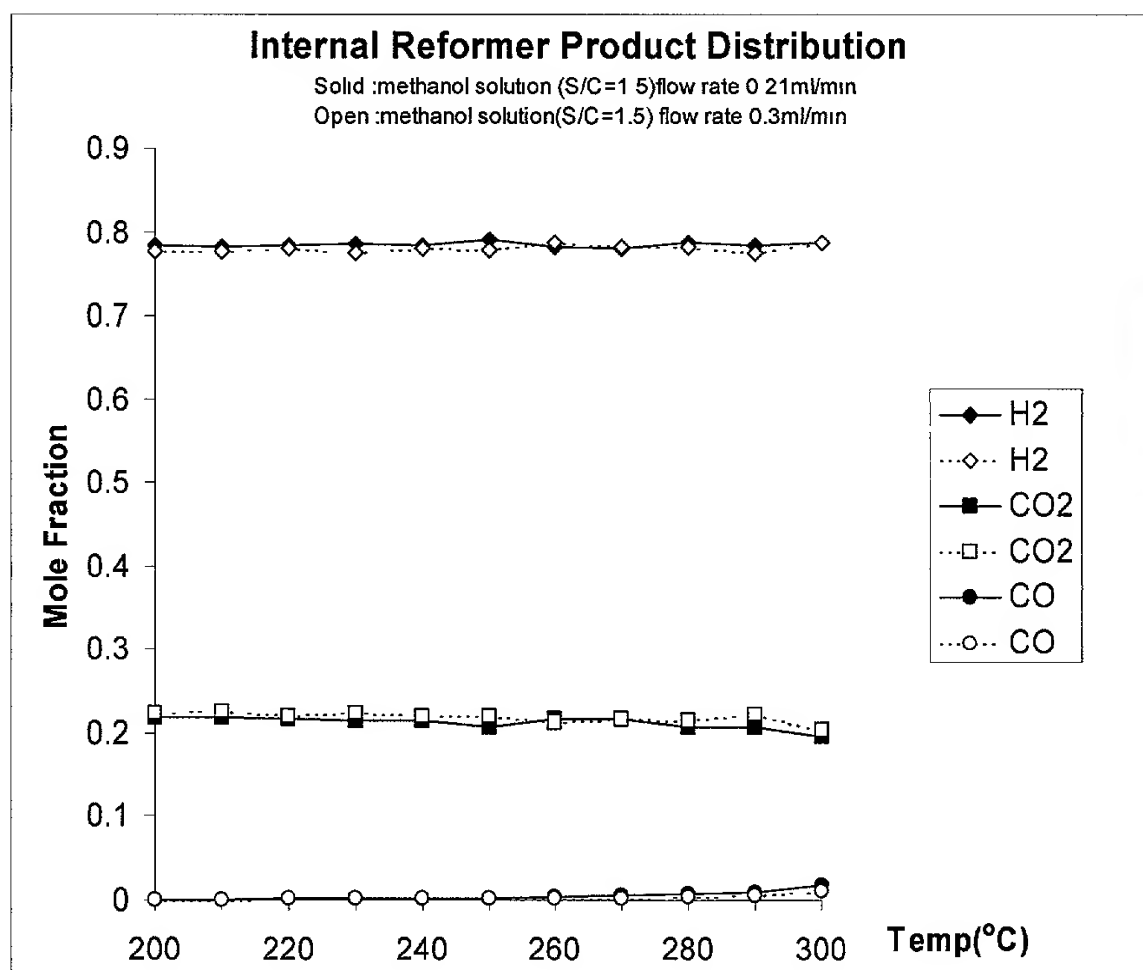


Figure 12